

IN THE CLAIMS:

Please cancel claims 2 and 17-23. **Please also amend** claim 1 as shown in the complete list of claims that is presented below.

1. (currently amended) A method of forming a silicon-on-insulator device, comprising:
defining an active region in a silicon-on-insulator substrate;
doping the entire active region a first time with boron;
masking a main part of the active region; and
doping peripheral parts of the active region at least a second time and a third time with boron or indium at different projection ranges,
wherein the impurity used is boron the second time and indium the third time, or indium the second time and boron the third time.

Claims 2-4 (cancelled).

5. (original) The method of claim 1, wherein the peripheral parts of the active region are doped the second and third times by ion implantation.
6. (original) The method of claim 5, wherein mutually different ion implantation energies are used the second time and the third time.
7. (original) The method of claim 5, wherein the peripheral parts of the active region are doped by ion implantation a fourth time in addition to the second time and the third time, mutually different ion implantation energies being used the second, third, and fourth times.
8. (original) The method of claim 1, wherein the silicon-on-insulator substrate is of the fully depleted type.
9. (original) The method of claim 1, wherein defining the active region comprises local oxidation of silicon.

Claim 10 (cancelled).

11. (previously presented) The method of claim 15, wherein the active region has a maximum thickness permitting full depletion during operation of the silicon-on-insulator device.

12. (previously presented) The method of claim 15, wherein:

the second average projection range is greater than the first average projection range;

the first average projection range is at most thirty nanometers less than the maximum thickness of the active region; and

the second average projection range is at most ten nanometers less than the maximum thickness of the active region.

Claim 13 (cancelled).

14. (previously presented) The method of claim 15, wherein the ions implanted into the peripheral parts of the active region with the first and second average projection ranges are boron difluoride ions.

15. (previously presented) A method of forming a silicon-on-insulator device, comprising:

defining an active region in a silicon-on-insulator substrate;

doping the entire active region with boron;

masking a main part of the active region;

implanting ions into peripheral parts of the active region with a first average projection range; and

implanting ions into the peripheral parts of the active region with a second average projection range different from the first average projection range,

wherein the ions implanted into the peripheral parts of the active region with the first average projection range are boron difluoride ions; and

wherein the ions implanted into the peripheral parts of the active region with the second average projection range are indium ions, the second average projection range being greater than the first average projection range.

16. (original) The method of claim 15, wherein the ions implanted into the peripheral parts of the active region with the first and second average projection ranges are indium ions.

Claims 17-23 (cancelled).